

Title (en)
PROCESSES AND INSTALLATIONS FOR DYEING SYNTHETIC FIBERS AND DYED FIBERS AND FABRICS CONTAINING SAID DYED FIBERS

Title (de)
VERFAHREN UND ANLAGEN ZUM FÄRBen VON KUNSTFASERN UND GEFÄRBTE FASERN SOWIE GEWEBE MIT DIESEN GEFÄRBTEN FASERN

Title (fr)
PROCÉDÉS ET INSTALLATIONS DE TEINTURE DE FIBRES SYNTHÉTIQUES, ET FIBRES TEINTES ET TISSUS CONTENANT LESDITES FIBRES TEINTES

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Application
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Priority
EP 2018051594 W 20180123

Abstract (en)
[origin: WO2019145020A1] A process for dyeing, in particular vat dyeing, or coating synthetic fibers, in particular polyester fibers and/or polyamide fibers, or yarns comprising or consisting of synthetic fibers or fabrics comprising or consisting of synthetic fibers or of yarns comprising or consisting of synthetic fibers, said process comprising the steps of: a) providing a multitude of fibers comprising or consisting of synthetic fibers, in particular polyester fibers and/or polyamide fibers, or providing at least one yarn, in particular a multitude of yarns, comprising or consisting of synthetic fibers, in particular polyester fibers and/or polyamide fibers, or providing at least one fabric comprising or consisting of synthetic fibers, in particular polyester fibers and/or polyamide fibers; and b1) providing at least one powdered dye or a powdered precursor dye, in particular powdered leuko dye, or providing at least one aqueous dye formulation or at least one aqueous precursor dye formulation, in particular an alkaline aqueous leuko dye formulation, c1) providing an aqueous system comprising at least one lipase enzyme, in particular lipase from Candida sp., and d1) pretreating said multitude of fibers or said yarn or said multitude of yarns or said fabric with the aqueous system comprising the at least one lipase enzyme, in particular lipase from Candida sp., and e1) coating or dyeing said pretreated multitude of fibers or said pretreated yarn or multitude of yarns or said pretreated fabric with said at least one powdered dye or with said powdered precursor dye, in particular powdered leuko dye, or with said at least one aqueous dye formulation or with said at least one aqueous precursor dye formulation, in particular the alkaline aqueous leuko dye formulation; or b2) providing at least one powdered dye or a powdered precursor dye, in particular powdered leuko dye, or providing at least one aqueous dye formulation or at least one aqueous precursor dye formulation, in particular an alkaline aqueous leuko dye formulation, c2) providing an aqueous system comprising nano-sized polyurethane particles, at least one cross-linking agent and at least one wetting agent and d2) pretreating said multitude of fibers or said yarn or said multitude of yarns or said fabric, in particular said fabric, with said aqueous system comprising said nano-sized polyurethane particles, at least one cross-linking agent and at least one wetting agent and e2) coating or dyeing said pretreated multitude of fibers or said pretreated yarn or multitude of yarns or said pretreated fabric with said at least one powdered dye or with said powdered precursor dye, in particular powdered leuko dye, or with said at least one aqueous dye formulation or with said at least one aqueous precursor dye formulation, in particular the alkaline aqueous leuko dye formulation; or b3) providing at least one powdered dye or a powdered precursor dye, in particular powdered leuko dye, or providing at least one aqueous dye formulation or at least one aqueous precursor dye formulation, in particular an alkaline aqueous leuko dye formulation, c3) providing an aqueous system comprising at least one base, in particular an alkali hydroxide, more in particular potassium hydroxide, and optionally at least one wetting agent, and d3) pretreating said multitude of fibers or said yarn or said multitude of yarns or said fabric, in particular said multitude of fibers, yarn or multitude of yarns, with said aqueous system comprising the at least one base and optionally the at least one wetting agent, and e3) coating or dyeing said pretreated multitude of fibers or said pretreated yarn or multitude of yarns or said pretreated fabric with said at least one powdered dye or with said powdered precursor dye, in particular said powdered leuko dye, or with said at least one aqueous dye formulation or with said at least one aqueous precursor dye formulation, in particular the alkaline aqueous leuko dye formulation.

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